

UNITED STATES OF AMERICA  
DEPARTMENT OF ENERGY  
OFFICE OF FOSSIL ENERGY

PP-230-4  
US Department of Energy

JAN 5 2009

Electricity, Delivery and Energy Reliability

International Transmission Company )  
d/b/a ITC*Transmission* )  
)  
)

Docket No. PP-230-3

REQUEST OF  
INTERNATIONAL TRANSMISSION COMPANY  
D/B/A ITC*TRANSMISSION*  
TO AMEND PRESIDENTIAL PERMIT

Pursuant to Executive Order No. 10485, as amended by Executive Order 12038; Section 202(e) of the Federal Power Act, 16 U.S.C. § 824(e); and Section 320, *et. seq.*, of the Rules of Administrative Procedure of the Department of Energy ("DOE" or the "Department"), 10 C.F.R. § 205.320 *et. seq.*, International Transmission Company d/b/a ITC*Transmission* ("ITC") respectfully requests DOE to amend the above-referenced Presidential Permit held by ITC to authorize modifications to facilities interconnecting ITC with Hydro One Networks Inc. ("Hydro One") on the United States-Canada border (the "Interconnection Facilities").

Presidential Permit PP-230-3, among other things, authorized ITC to operate and maintain the Interconnection Facilities, including one 230,000 volt (230kV) transmission line, and one 675-MVA phase shifting transformer connecting ITC's Bunce Creek Station located in Maryville, Michigan with Hydro One's Scott Transformer Station located in Sarnia, Ontario. As explained below, the Bunce Creek phase shifting transformer failed while in service in March, 2003. ITC hereby requests authorization to replace the aforementioned transformer with two 700-MVA phase shifting transformers connected in series. To ensure the reliability of service provided over the Interconnection

Facilities and over the transmission systems located in regions adjacent to the Interconnection Facilities, ITC commits that the operation of the Interconnection Facilities, as modified, will comply with all applicable criteria, standards, and guidelines established by the North American Electric Reliability Corporation (“NERC”) and directives of the Midwest Independent Transmission System Operator, Inc. (“Midwest ISO”), the NERC-registered Reliability Coordinator for the Interconnection Facilities.

In support of this application, ITC is submitting herewith technical information regarding the new transformers and two recent reports jointly prepared and issued by the Midwest ISO and by PJM Interconnection, L.L.C. (“PJM”), which confirm the need to control inadvertent power flows around Lake Erie as the new transformers are intended to do.

ITC hereafter provides the information required under Section 205.322 of DOE’s regulations, 10 C.F.R. § 205.322.

## **I. INFORMATION REGARDING APPLICANT**

1. The exact legal name of the applicant is International Transmission Company d/b/a *ITCTransmission*. ITC is a regulated public utility incorporated under the laws of the State of Michigan and is authorized to conduct business in Michigan. ITC has its principal offices at 27175 Energy Way, Novi, Michigan 48377. ITC is an independent, stand-alone transmission company engaged exclusively in the transmission of electric energy in interstate commerce. Transmission service over ITC’s facilities is provided by the Midwest ISO pursuant to its Transmission and Energy Markets Tariff.

2. ITC is not a party to a partnership agreement with any entity with a relation to the Interconnection Facilities.

3. Communications concerning this application should be addressed to the following:

James Frankowski  
ITC Holdings Corp.  
27175 Energy Way  
Novi, MI 48377  
Tel: (248) 946-3540  
[jfrankowski@Itctransco.com](mailto:jfrankowski@Itctransco.com)

John R. Staffier  
Stuntz, Davis & Staffier, P.C.  
555 Twelfth Street, N.W., Suite 630  
Washington, D.C. 20004  
Tel: (202) 737-8060  
[jstaffier@sdsatty.com](mailto:jstaffier@sdsatty.com)

4. All of the transmission facilities covered by Presidential Permit PP-230-3 are wholly owned by ITC. The portions of the transmission lines that cross the international border that are located in Michigan are wholly owned by ITC. The portions of those lines that are located in Ontario are owned by Hydro One.

5. ITC (as successor to Detroit Edison Company ("DTE")) and Hydro One (as successor to Ontario Hydro), are parties to an Interconnection Agreement dated as of January 29, 1975, as amended on July 20, 1976; June 21, 1979; April 1, 1985; October 3, 1988; and February 1, 1991. A copy of the Interconnection Agreement is on file with the DOE Office of Fossil Energy.

6. A signed opinion of counsel, stating that the modification to ITC's Presidential Permit being requested herein is within ITC's corporate powers and that ITC has complied with or will comply with all pertinent federal and state laws, is attached hereto as Attachment A.

## II. INFORMATION ABOUT THE FACILITIES

The electrical systems of ITC and Hydro One are interconnected at four points on the border between the United States and Canada. The U.S. facilities were originally owned and operated by DTE and the Federal Power Commission issued Presidential Permits to DTE authorizing the installation and operation of each facility. See 54 FPC ¶ 332 (1975); 48 FPC 752 (1972); 35 FPC 292 (1966); 16 FPC 1348 (1956); and 12 FPC 1359 (1953). Ownership of the facilities was subsequently transferred from DTE to ITC and, accordingly, DOE issued Presidential Permits to ITC covering the facilities. See Permits PP-230-2 (2001) and PP-230-3 (2003). These facilities are identified as follows:

- (a) Facility B3N, a 230 kV transmission line, including one 675-MVA phase shifting transformer connecting ITC's Bunce Creek Station, located in Marysville, Michigan, with Hydro One's Scott Transformer Station, located in Sarnia, Ontario. The transmission line was originally authorized under Presidential Permit PP-21, and the transformer was originally authorized in Presidential Permit PP-230-2;
- (b) Facility L4D, a 345 kV transmission line connecting ITC's St. Clair Generating Station, located in East China Township, Michigan, with Hydro One's Lambton Generating Station, located in Moore Township, Ontario, originally authorized under Presidential Permit PP-38;
- (c) Facility L51D, a 230 kV transmission line connecting ITC's St. Clair Generating Station, located in East China Township, Michigan with Hydro One's Lambton Generating Station, located in Moore Township, Ontario, originally authorized under Presidential Permit PP-58; and
- (d) Facility J5D, a 230 kV transmission line connecting ITC's Waterman Station, located in Detroit, Michigan, with Hydro One's

J. Clark Keith Generating Station, located in Windsor, Ontario, originally authorized under Presidential Permit PP-21.

ITC does not propose to make any physical changes to the existing overhead conductors, shield wires, supporting structures or rights of way currently authorized in Presidential Permit PP-230-3. ITC does, however, request authorization permitting it to install and place into service two 700-MVA phase shifting transformers connected in series at the Bunce Creek station, to replace the previously authorized 675-MVA transformer.

As referenced above, the 675-MVA transformer at Bunce Creek was originally authorized in Presidential Permit PP-230-2, issued on April 19, 2001. As stated in the Permit, the purpose of the transformer was to help provide “enhanced control over the inadvertent power flow between Michigan and Ontario and, by extension, around Lake Erie” (Permit at 2), so that “under normal operating conditions ... the electrical flow on the Michigan-Ontario interface will match the Michigan-Ontario scheduled transactions across the interface.” (Permit at 6).

The Bunce Creek transformer failed while in service in March, 2003. Shortly thereafter, the tower supporting the Canadian side of the Bunce Creek/Scott transmission line collapsed due to inclement weather, causing the line itself to fail. Due to unexpected delays in Canada, replacement of the tower and restringing of the line was not completed until the Fall of 2006.

When the transmission line was restored to service, replacement facilities for the Bunce Creek transformer were ordered. In recognition of the failure of the original transformer, however, ITC chose a differently designed unit and decided to replace the single failed unit with two 700-MVA units connected in series. Each unit will be capable

of shifting plus or minus 30 degrees, giving them a total of plus or minus 60 degrees of shifting capability in series. The failed 675-MVA transformer, in contrast, had only plus or minus 45 degrees of shifting capability.

Since the two new transformers will nominally have 15 degrees more shifting capability than the failed transformer, they should be capable of providing some increased amount of control over unscheduled electrical flows when necessary. However, the intended function of the new units will be the same as the original unit was authorized to provide in 2001 -- to control unscheduled flows so that actual flow matches scheduled flow, to the maximum extent possible. In that sense, therefore, the new units should perhaps best be viewed as replacement facilities providing an already authorized service, rather than as new facilities providing a new service.

As indicated in ITC's November 7, 2008 letter to DOE regarding Presidential Permit PP-230-2, the first of the two new transformers was delivered to Port Huron, Michigan in late October, 2008. It has been transported from there to the Bunce Creek Station and is now being installed, a process that will take several months. The transformer, however, will not be energized and placed into service until after the second unit has been delivered and installed in the Fall of 2009. Until then, the new transformer will not have any impact on the flow of energy between the U.S. and Canada.

Technical information detailing the specifications of the new transformers and a drawing showing the new configuration of the Bunce Creek Station facilities are included in Attachment B. Attachment C is an affidavit verifying the matters set forth in this application in accordance with Section 322(e) of DOE's regulations, 10 C.F.R. §205.322(e). Attachment D includes Phase I and Phase II reports jointly prepared and

issued on May 25, 2007 and November 12, 2008, respectively, by the Midwest ISO and PJM entitled “Investigation of Loop Flows Across Combined Midwest ISO and PJM Footprint”. Those reports confirm that inadvertent power flows around Lake Erie continue to be a significant problem and specifically endorse the prompt commissioning of flow control devices on the Michigan-Ontario interface as an important part of the solution. (See e.g. the May 25, 2007 report at 3-6). The New York Independent System Operator, Inc. (“NYISO”) expressed similar views in an emergency rate filing that it submitted to the Federal Energy Regulatory Commission (“FERC”) in Docket No. ER08-1281 on July 21, 2008, to address problems related to the scheduling of transactions over circuitous paths around Lake Erie. (See NYISO filing at 26-27). In sum, each of the three regional transmission organizations that together operate the U.S. electrical transmission system around Lake Erie have specifically and very recently endorsed the need to promptly activate flow control facilities on the Michigan-Ontario interface. Their positions, and the reports included in Attachment D, confirm the beneficial effects of controlling inadvertent power flow around Lake Erie and matching actual power flows to scheduled flows to the maximum practical extent. Accordingly, the attached reports fully support installation and operation of the new 700-MVA Bunce Creek transformers to control inadvertent power flows, as proposed herein.

### **III. ENVIRONMENTAL IMPACT INFORMATION**

The modifications to the Interconnection Facilities for which ITC seeks authorization will be made in their entirety within the boundaries of ITC’s Bunce Creek Station. None of the modifications are for the integration of a major new source of

generation into a main transmission system. For these reasons, the proposed modifications to the Interconnection Facilities will not have any significant environmental impact. Accordingly, like the installation of the original 675-MVA transformer at Bunce Creek (See PP-230-2 at 4), installation of the replacement units clearly qualifies for a categorical exclusion from environmental review under Appendix B to Subpart B, paragraph B4.6 of the revised DOE Regulations implementing the National Environmental Policy Act.

#### **IV. PRACTICAL ALTERNATIVES TO PROPOSED MODIFICATIONS**

ITC does not believe that there are any practical alternatives to the modifications to the Interconnection Facilities for which it seeks authorization.

#### **V. SERVICE AND FEE**

In accordance with the requirements of 10 C.F.R. § 205.326, copies of this application will be provided to the following:

Kimberly D. Bose, Secretary  
Federal Energy Regulatory Commission  
888 First Street, N.E.  
Washington, D.C. 20426

Mary Jo Kunkle  
Executive Secretary  
Michigan Public Service Commission  
6545 Mercantile Way, Suite 11  
Lansing, Michigan 48911

A check in the amount of \$150 made payable to the Treasurer of the United States is enclosed in payment of the fee specified in 10 C.F.R. § 205.326.



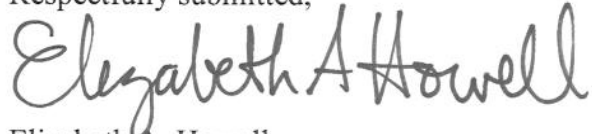
## VI. REQUEST FOR EXPEDITED CONSIDERATION

ITC respectfully requests that DOE act on this request in an expedited manner in order to insure that the new replacement facilities discussed herein can be placed into service as soon as they are ready, in the Fall of 2009. Accordingly, ITC requests that notice of this filing be published in the Federal Register as soon as practicable; that the period for the submission of comments, protests, or requests to intervene be shortened; and that DOE issue its order in an expedited manner.

## VII. CONCLUSION

For the foregoing reasons, ITC respectfully requests the Department of Energy to amend Presidential Permit PP-230-3 to permit modification of the Interconnection Facilities authorized thereunder as described herein.

Respectfully submitted,



Elizabeth A. Howell  
Vice President, Operations  
International Transmission Company  
d/b/a ITC *Transmission*  
27175 Energy Way  
Novi, MI 48377  
Tel: (248) 946-3000  
ehowell@Itctransco.com

Dated: ~~December 30, 2008~~  
*January 5, 2009*

## **ATTACHMENT A**

### **Opinion of Counsel**



December 30, 2008

Anthony J. Como  
Director  
Permitting and Siting  
Office of Electric Delivery and Energy Reliability  
U.S. Department of Energy  
1000 Independence Ave., SW  
Room 6H-050, OE-20  
Washington, DC 20585

Re: Presidential Permit Order No. PP-230-3

Dear Mr. Como,

In connection with the application of International Transmission Company d/b/a *ITCTransmission* ("ITC") to amend its Presidential Permit No. PP-230-3, and in satisfaction of the requirements of Section 205.322(a)(6) of the Department of Energy's regulations, 10 C.F.R. § 205.322 (a)(6), I have reviewed ITC's Articles of Incorporation and its Bylaws, and I hereby confirm that the modifications to the permit being requested by ITC, including the proposed installation and operation of new transformation facilities at ITC's Bunce Creek Station in Marysville, Michigan, is within ITC's corporate power. I further confirm that ITC has complied and will continue to comply with all applicable Federal and State laws regarding its Bunce Creek facilities.

Very truly yours,

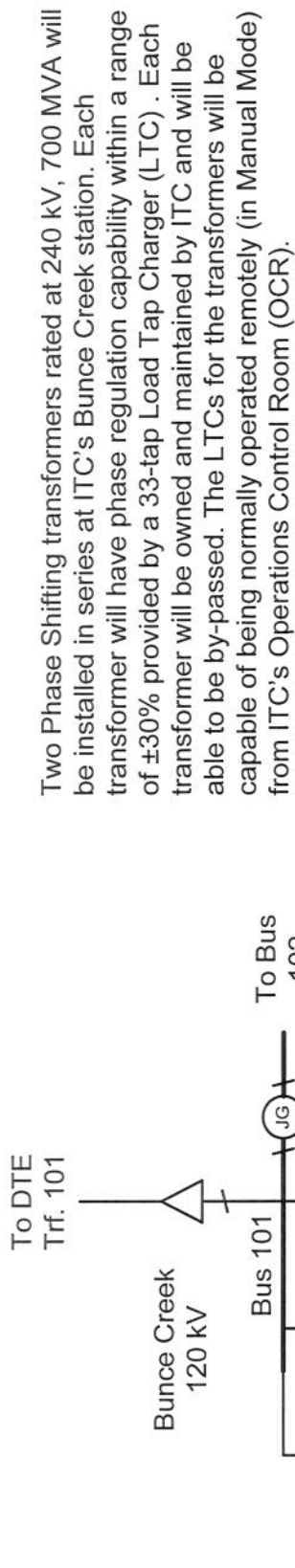
A handwritten signature in dark ink, appearing to read "James Frankowski", is written over a horizontal line.

James Frankowski  
Senior Attorney  
ITC Holdings Corp.  
Attorney for International Transmission  
Company d/b/a *ITCTransmission*

## **ATTACHMENT B**

### Facility Information

# Bunce Creek Phase Shifters



+/- 30° Phase Shifting Capability at No Load

+/- 30° Phase Shifting Capability at No Load



## **ATTACHMENT C**

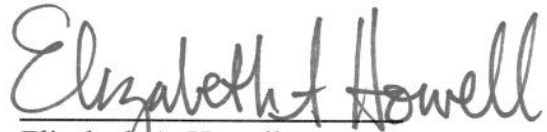
### Verification

**AFFIDAVIT OF ELIZABETH A. HOWELL**

STATE OF MICHIGAN )

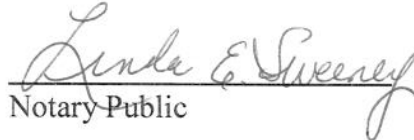
COUNTY OF OAKLAND )

I, Elizabeth A. Howell, Vice President, Operations, of International Transmission Company d/b/a ITC *Transmission* ("ITC"), being first duly sworn, hereby depose and say that I have read the attached "Request of International Transmission Company d/b/a ITC *Transmission* to Amend Presidential Permit" being filed by ITC in OFE Docket No. PP-230-3, that I am familiar with the contents thereof and that all of the facts and statements contained therein are true and correct to the best of my knowledge, information and belief.



Elizabeth A. Howell  
Vice President, Operations  
International Transmission Company  
d/b/a ITC *Transmission*

Sworn and subscribed before me, a Notary Public, this 30<sup>th</sup> day of December, 2008.

  
Notary Public

My Commission expires: 5/26/2015

LINDA E. SWEENEY  
NOTARY PUBLIC, STATE OF MI  
COUNTY OF WAYNE  
MY COMMISSION EXPIRES May 26, 2015  
ACTING IN COUNTY OF OAKLAND



## **ATTACHMENT D**

### **MISO/PJM Loop Flow Reports**

# Investigation of Loop Flows Across Combined Midwest ISO And PJM Footprint

May 25, 2007

